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Examining Cultural Specificity in the Relationships between Daily Events and Daily Psychological Adjustment

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College of William & Mary - Arts & Sciences

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Examining Cultural Specificity in the Relationships Between Daily Events and Daily
Psychological Adjustment

A Thesis

Presented To

The Faculty of the Department of Psychology
The College of William & Mary in Virginia

In Partial Fulfillment

Of the Requirements for the Degree of
Masters of Arts

By

Monica Robin Allen

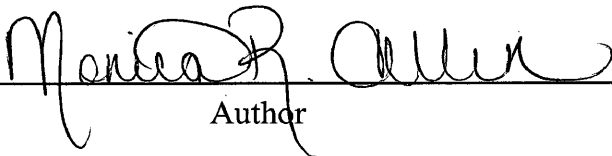
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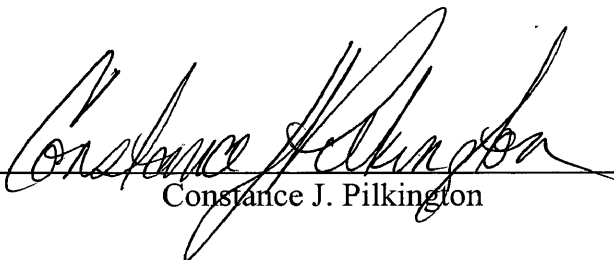


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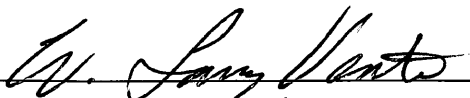
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ABSTRACT

The present study examined the relationships between daily psychological states, daily events, and how relationships between adjustment and events varied across cultural groups. Every day for two weeks, African and European American students described their self-esteem, spirituality, and depressogenic adjustment and they described the events that occurred each day. Participants also provided trait level measures of self-esteem, spirituality, and depression. Hierarchical Linear Modeling (HLM) analyses found that there are significant covariations in the relationships between daily psychological states and daily events such as: self-esteem mean scores went up when positive events went up and self-esteem mean scores went down when negative events went up. In addition, there are significant relationships between African American and European American cultural groups such as: African Americans are higher than European Americans in trait and state level self-esteem.

Examining Cultural Specificity in the Relationships Between Daily Events and Daily
Psychological Adjustment

Examining Cultural Specificity in the Relationships Between Daily Events and Daily Psychological Adjustment

Over the years, researchers have examined relationships between daily events and daily psychological states. More specifically, they have examined two types of relationships: the within-person covariation between daily events and daily states and individual differences in such within-person relationships. Despite this attention, no study has compared relationships within and between African and European Americans simultaneously. In light of this, the present study examined relationships between daily psychological states and daily events and individual differences in such within-person relationships in African and European Americans. Each night for two weeks, participants described their psychological well-being and the positive and negative events that occurred that day. In addition, participants provided trait level measures of spirituality, depression, and self-esteem.

For present purposes, daily measures of characteristics are referred to as state level measures. Although most studies on personality have tended to focus on trait level measures, personality characteristics have been examined at the state level (Gable & Nezlek, 1998; Greenier et al., 1999; Greenier, Kernis, & Waschull, 1995; Kernis, 1993; Kernis, Paradise, Whitaker, Wheatman & Goldman, 2000; Nezlek & Gable, in press; Nezlek, Feist, Wilson & Plesko, in press; Nezlek & Plesko, 2001). In the present study, both trait and state levels of measures were used, and participants described self-esteem, depressogenic states, spirituality, positive and negative events.

Self-esteem

Self-esteem is variously defined by theorists as “a positive or negative attitude toward a particular object, namely, the self” (Rosenberg, 1965), “the level of global regard that one has for the self as a person” (Harter, 1990, 1986), and “an individual’s sense of his or her value or worth, or the extent to which a person values, approves, appreciates, or likes him or herself” (Blascovich & Tomaka, 1991). Self-esteem studies generally include three types: those that focus on state level self-esteem, those that focus on trait level self-esteem and those that focus on both trait and state level self-esteem. Studies on state level self-esteem emphasize the instability of self-esteem across short periods, whereas studies on trait level self-esteem focus on the stability across longer periods (Gable & Nezlek, 1998; Greenier et al., 1999; Kernis, 1993; Kernis et al., 2000). In the present study, self-esteem was examined at both the trait level and state levels.

Throughout the past several decades, researchers have found that the experience of positive and negative daily life events can influence how an individual thinks and feels (e.g., Butler, Hokanson, & Flynn, 1994; DeLongis, Folkman, & Lazarus, 1988; Greenier et al., 1999; Nezlek & Gable, in press; Nezlek & Plesko, 2001; Zautra, Guarnaccia, & Reich, 1989). Although most of the daily event and affect studies have been on the impact of negative events (e.g., Bolger, & Schilling, 1991; Bolger, DeLongis, Kessler, & Schilling, 1989; Suls, Martin, & David, 1998), there are a growing number of studies on the effect of positive events (Butler et al., 1994; Eronen & Nurmi, 1999; Gable, Reis, & Elliot, 2000; Langston, 1994; Nezlek & Gable, in press; Nezlek & Plesko, 2001; Nezlek et al., in press; Zautra & Reich, 1983). Research indicates that people who experience

negative events tend to feel worse on days when they occur, and people who experience positive events tend to feel better on days when they occur (Butler et al., 1994; David, Green, Martin, & Suls, 1997; Nezlek & Gable, in press). Furthermore, this same research implies that self-esteem and mood vary as a function of daily events (Butler et al., 1994; Campbell, Chew, & Scratchley, 1991; Eck, Nicolson, & Berkhof, 1998; Johnson, 1998; Nezlek & Gable, in press; Nezlek & Plesko, 2001). As we go through our daily lives, we feel good and we feel bad according to the events we experience, and sometimes the way we feel is a function of our personality traits and characteristics.

Research on self-esteem and mood indicates that not only do people feel better or worse according to events experienced, but, also there are certain personality traits and characteristics (e.g., neuroticism, extraversion, and depressogenic states) that influence reactions to events (Nezlek & Gable, in press). Reactions to daily positive and negative events are defined as individual differences (i.e., personality traits & characteristics) in the relationships between daily psychological states and daily events. Some researchers believe that reactions to positive events are best understood by considering individual differences in intrapersonal factors (e.g., neuroticism, extraversion, and depression); whereas, reactions to negative events are best understood by considering individual differences in interpersonal factors (e.g., social support) (Nezlek & Allen, 2001). Nezlek and Allen (2001) believed individual differences in psychological traits would moderate reactivity to daily events and therefore examined the moderating effects of trait level variables such as depression and neuroticism. For instance, they found that depressed

individuals reacted more strongly to positive events than those who were less depressed; yet, those who were high in neuroticism did not react strongly to positive events.

Headey and Wearing's (1989) study on personality found individuals with higher extraversion scores reported more favorable life events; in addition, neuroticism predisposed individuals to experience more adverse events, and openness was related to experiencing both positive and adverse events. Furthermore, Bolger and Schilling (1991) indicated that when experiencing negative life or stressful events high and low neuroticism persons may be equally upset by a stressful event on the day it occurs, but high neuroticism persons may remain distressed longer than low neuroticism persons, and consequently show higher average distress levels. These findings and others have important implications for future studies in day-to-day psychological research.

Race and Self-Esteem

To date, no studies have examined the relationships between daily psychological states and daily events in both African American and European American college students simultaneously. Thus far, research that has compared African Americans and European Americans implies that although racial differences in self-esteem may have existed at one time, at present, such differences may be minimized. Beginning in the early 1900's, research concerning black and white self-esteem indicated that African Americans were lower in self-esteem than European Americans. For example, Clark and Clark (1939) conducted a doll study on African American children and found that African American children preferred white dolls to black dolls. As a result of their finding, they suggested that African American children were lower in self-esteem than

European American children. For many years after Clark and Clark's (1939) finding, there was a strong belief that African Americans (children and adults) had lower self-esteem than European Americans, mainly due to the experience of being stigmatized, devalued, and targeted by prejudice and discrimination (Crocker & Lawrence, 1999).

In contrast to earlier studies on cultural differences in self-esteem, recent research measuring self-esteem indicates that self-esteem of African Americans is at least as high as that of European Americans (Crocker & Lawrence, 1999; Crocker & Major, 1989; Hoelter, 1983; Hraba & Grant, 1972; Major & Schmader, 1998; Porter & Washington, 1979; Tashakkori & Thompson, 1991; Wade, Thompson, Tashakkori, & Valente, 1989). Furthermore, a meta-analysis of the existing studies on African Americans and European Americans suggests that African Americans have significantly higher self-esteem than European Americans (Twenge & Crocker, 1998). Although some researchers (Bachman & O'Malley, 1984; Jenkins, 1995; Martinez & Dukes, 1991; White, 1984) feel there might be some limitations to this research, the majority of newer research is quite consistent.

Crocker and Lawrence (1999) conducted two studies on race, self-esteem, disadvantage, and discrimination in college students and their findings were consistent with previous research (Crocker & Major, 1989); they found that African American's self-esteem was slightly higher than that of European American's despite beliefs that they are discriminated against and feel at a disadvantage relative to European Americans. Crocker and Lawrence (1999) believe that although African Americans are aware of white racial prejudice, they may not consider European American's appraisals of them to

be particularly valid. As a result, African Americans may base their self-esteem not on what European Americans think; rather, they may base their self-esteem on what other African Americans think of them. Other differences in self-esteem were explored when Crocker and Lawrence (1999) included contingencies of self-esteem. They found African American students were less likely to base self-esteem on appearance, school competence, or love of friends and family, and more likely to base self-esteem on God's love (spirituality), than were European American students. They concluded that the contingencies of self-esteem for African Americans are less external and dependent on others than are the contingencies of self-esteem for European American students.

Why is there so much evidence for higher self-esteem among African Americans than European Americans has been asked for several years now (Crocker & Lawrence, 1999; Crocker, 1999; Simmons, 1978). It was not until the beginning of the 1970's that researchers concluded that despite racism in society there is little evidence of racism actually affecting people's self-esteem (Martinez & Dukes, 1991). For negative attitudes of European Americans towards African Americans to affect African American's self-esteem, African Americans must be aware of these attitudes, accept them, consider them significant, and believe them to be personally relevant (Hughes & Demo, 1989). For example, although most African Americans are aware of the negative attitudes, many do not believe that all non-African Americans have negative attitudes towards them. In support of these findings, previous research concluded that self-esteem is group specific (Cartwright, 1950) and that African Americans base their self-esteem on their social

group and whites base their self-esteem on their social group (Crocker & Lawrence, 1999).

Specifically, in the present study, almost all of the African Americans were within and around their same racial group and almost all of the European Americans were within and around their same racial group on two different college campuses. In addition, self-esteem has been strongly linked to reflected appraisals of parents, friends, and teachers (Rosenberg & Simmons, 1971). According to Mead's (1934) "looking-glass self", the self-concept develops through interactions with others and is a reflection of those others' appraisals of oneself. Recent research on self-esteem and reflected appraisals has suggested that many minority groups learn to protect their self-regard by recognizing that many of the negative outcomes they receive are a result of prejudice and discrimination against their group (Crocker & Major, 1989). As a result, negative evaluations of African Americans are attributed to external sources rather than internal sources (i.e., their selves) (Quinn & Crocker, 1998). Therefore, there is reason to believe that culture specific self-esteem is not based on what the outgroup thinks, but culture specific self-esteem is based on what the ingroup thinks.

Contrast to the belief that self-esteem is greater among African Americans than among European Americans, several researchers have suggested that members of minority groups do have lower self-esteem than members of the dominant group (Martinez & Dukes, 1987; Thomas & Hughes, 1986; Turner & Turner, 1982). Martinez and Dukes (1991) imply that conflicting results in empirical research on self-esteem could be due to two domains: public and private. According to Martinez and Dukes

(1991) the public domain component is tied to dominant institutions like school and work in which institutional racism results in lower self-esteem. In contrast, the private domain component is linked more closely to intimate interaction wherein cultural standards other than those of the dominant group are used as the basic frame of reference for self-evaluations (Martinez & Dukes, 1991). Martinez and Dukes (1991) indicate, in the public domain, members of minority groups are likely to have lower self-esteem than European Americans, whereas, in the private domain, minorities are likely to have self-esteem that is equal to or higher than that of European Americans (Heiss & Owens, 1972; Taylor & Walsh, 1979; Turner & Turner, 1982). Although theories on the public and private domains are important, they are not specifically examined in this research.

Spirituality

Spirituality has been variously defined by theorists as “the acceptance of or belief in the sacred force that resides in all things” (Potts, 1991), and “that vast realm of human potential dealing with ultimate purposes, with higher entities, with God, with love, with compassion, with purpose” (Tart, 1983). Ellison (1983) explains that the human spirit motivates individuals to search for meaning and posits that the spiritual dimension integrated body and mind. Thus, many dimensions of spirituality have been theorized to be positively related to well-being or psychological adjustment. In addition, there is growing empirical evidence that people’s spiritual values and behaviors can promote physical and psychological coping, healing, and well-being (Pargament, 1997; Payne, Bergin, Bielema, & Jenkins, 1991; Richards & Bergin, 1997). In this study, spirituality is

defined as the connection to something greater than the self that gives meaning and helps one live a more fulfilling life.

To understand spirituality, clear-cut distinctions must be made between spirituality and religiosity. According to Jones (1996), religiosity refers to the endorsement of organized religion (e.g., attending a worship service, observing a particular religious doctrine or tradition); whereas, spirituality is a broader term that focuses on the relationship between the individual and a transcendent force. Furthermore, spirituality refers to heterogeneous practices not necessarily connected to an organized religious institution, but connected to one's personal belief and experience of the sacred (Turner, Lukoff, Barnhouse, & Lu, 1995). Therefore, it is possible to be spiritual and yet not be religious. In this study, spirituality was operationalized independent of religious beliefs.

Spirituality, Self-Esteem, and Race

Research on self-esteem and spirituality has grown in recent years; however, no study has investigated the role of spirituality in the relationships between daily events and daily psychological states in African Americans and European Americans. Research on African American and European American spirituality has consistently found that African Americans tend to be higher in spirituality than European Americans (Crocker & Lawrence, 1999 and Blaine & Crocker, 1995). Crocker and Lawrence (1999) found that African Americans based their self-esteem on God's love (spirituality) more than European Americans. Crocker and Lawrence (1999) also found that African American's self-esteem is less contingent on external social sources and more contingent on

perceptions of God's love, and African Americans do not have lower self-esteem than European Americans (Crocker & Blanton, 1999; Crocker & Quinn, 1998). Researchers have also suggested that African Americans should have a greater need for spirituality because evidence indicates that African Americans face objectively more complicated life circumstances than European Americans (Dovidio & Gaertner, 1986).

Interval Contingent Studies

The present study is referred to as a "diary" study in which events and feelings are recorded daily. Wheeler and Reis (1991) defined this type of study as an interval contingent study, in which recording of events happen at the end of the day or at some other predetermined time. In the present study, participants recorded at the end of the day what they felt, thought, and perceived for the present day. For instance, in this study participants provided responses on self-esteem, depressogenic states, and spirituality at the end of each night for 14 consecutive days. According to Wheeler and Reis (1991), interval-contingent methods are usually chosen when researchers want to study the prevalence of certain events in daily life or across some general time. Previous studies using the interval-contingent method have found that recording at the end of the day provides responses captured from the entire day on overall self-esteem, depressogenic states, mood and daily events successfully (e.g., Nezlek & Plesko, 2001; Nezlek et al., in press).

The focus of the present study was to examine the within person covariation of the relationships between daily psychological states and daily events. In addition, this

study also examined the individual differences of such within-person relationships in African Americans and European Americans. Five hypotheses guided the present study.

Hypothesis 1: Daily self-esteem will positively covary with positive events and daily self-esteem will negatively covary with negative events. This hypothesis was created in support of previous studies in that self-esteem positively covaries with positive events and negatively covaries with negative events (e.g., Butler et al., 1994; David, Green, Martin, & Suls, 1997; Nezlek & Gable, in press; Nezlek & Plesko, 2001).

Hypothesis 2: The covariation between daily self-esteem and daily negative events will be stronger and significantly different than the covariation between daily self-esteem and daily positive events. This hypothesis was suggested based off previous research that indicates daily self-esteem and daily negative event relationships are stronger and significantly different than the daily self-esteem and daily positive event relationships (Nezlek & Allen, 2001; Nezlek & Gable, in press).

Hypothesis 3: African Americans will be higher than European Americans in self-esteem at the trait and state level. This hypothesis was suggested based off previous research on African and European American's self-esteem. Results from previous literature indicate that African Americans are higher in self-esteem than European Americans (Crocker & Lawrence, 1999; Crocker & Major, 1989; Hoelter, 1983; Hraba & Grant, 1972; Major & Schmader, 1998; Porter & Washington, 1979; Tashakkori & Thompson, 1991; Wade et al., 1989; Twenge & Crocker, 1998). Therefore, similar results to previous studies are expected in the present study.

Hypothesis 4: Spirituality will positively covary with daily self-esteem. For every 1-point spirituality increases, self-esteem also increases. Positive feelings are a major component of spirituality, so if individuals are spiritual then they should also feel better about themselves than those who are less spiritual. Moreover, high perceived self-esteem is a major component of spirituality (Pederson, 1998)

Hypothesis 5: There will be a race effect on the spirituality-self-esteem slope in that African Americans will be higher on spirituality-self-esteem mean scores than European Americans. According to previous literature, African Americans are significantly higher than European Americans in spirituality and self-esteem. Therefore, it is likely that they will also be higher on the spirituality-self-esteem slope.

Method

Participants

Participants were 156 undergraduates attending The College of William & Mary and Hampton University who volunteered for the study in partial fulfillment of class requirements. There were 64 men and 92 women. Of the men and women, there were 88 European American and 2 African American students from The College of William & Mary and 1 European American and 65 African American students from Hampton University. Ages ranged from 17 – 22 with a Mean age of 19.15 and a SD of 1.20.

Trait Measures

During the introductory session, participants completed a series of questionnaires that provided measures of potential trait level moderators of within-person relationships between daily events and daily well-being. All trait level measures are in Appendix A.

Rosenberg Self-Esteem (RSE). Participants completed the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965) as a measure of participants' global level of self-esteem. Using a 5-point scale ranging from 1 = strongly disagree to 5 = strongly agree participants indicated their agreement or disagreement with positively worded statements such as: "I feel that I am a person of worth, at least on an equal plane with others," "I feel as if I am able to do things as well as most other people," and "I take a positive attitude towards myself." Participants also indicated their agreement or disagreement with negatively worded statements such as: "All in all, I am inclined to feel like a failure," "I feel as if I do not have much to be proud of," and "At times I think I am no good at all."

Center for Epidemiological Studies Depression Scale (CES-D). Developed by Radloff (1977), the CES-D contains 20 items describing symptoms of depression and was designed for non-clinical populations. Participants indicated how they may have felt or behaved during the past week. Using a 4-point scale ranging from 0 = rarely less than a day to 3 = mostly 5-7 days participants responded to statements such as: "I was bothered by things that usually don't bother me," "I felt that I was just as good as other people," "I felt depressed," and "I talked less than usual."

Spiritual Involvement and Beliefs Scale – Revised (SIBS-R). The Spiritual Involvement and Beliefs Scale – Revised (Hatch et al., 1998) is a 22-item scale used to determine core spirituality (COR), spiritual perspective/existential (EXI), personal application/humility (HUM) and acceptance/insight (INS). The items were presented on a 7-point scale, ranging from 1 = strongly disagree to 7 = strongly agree. Positively worded

items were: “I set aside time for meditation and/or self-reflection,” “I have joy in my life because of my spirituality,” and “my spiritual understanding continues to grow.”

Negatively worded items were: “Prayers do not really change what happens,” “In times of despair I can find little reason to hope,” and “I don’t take time to appreciate nature.”

Daily/State Measures

Each day participants described their self-esteem, depressogenic adjustment, and spirituality. In addition, participants also described the events that had happened that day. All daily measures are in Appendix B.

Daily events were measured using the Daily Events Scale (DES) (Butler et al., 1994). The DES contains 40-items used to measure daily events and is appropriate for the present study. Out of the 40 items on the DES, 26 of those were used for the present study. Of the 26, there were 14 positive items and 12 negative items that students chose from as a measure of the events experienced. Examples of positive events include “Had especially good interactions with friend(s) or acquaintances,” “Flirted with someone or arranged a date,” “Met a daily fitness goal,” and “Performed well (sports, music, speaking, drama, et.).” Examples of negative events include “Did poorly on schoolwork task (e.g. test, assignment, job duty,” “Was excluded or left out by my group of friend,” and “Failed to meet a daily fitness goal.” Positive and negative event items comprised 22 of the 26 items and to form the other four items, combinations of positive, negative, social, and achievement domains were created. An example of a combination item is “Had other type of pleasant event (not listed above) concerning performance at school, work, or another activity.” The 26 item scale used in this study has been found to

provide measures of daily events that are similar to the measures provided by the original 40 items used by Butler et al (1994) (Nezlek, in press; Nezlek & Gable, in press; Nezlek & Plesko, 2001).

Students used the following scale to rate each event: 0 = did not occur, 1 = occurred and not important, 2 = occurred and somewhat important, 3 = occurred and pretty important, 4 = occurred and extremely important. Summary scores for daily events were calculated by determining the average number of positive events and the average number of negative events for each day.

Daily self-esteem was measured using four items (3, 6, 7, and 10) from the Rosenberg Self-Esteem Scale (RSE) (Rosenberg, 1965). Questions were reworded to refer to how participants felt about themselves that day. Using a 7-point likert scale participants provided responses to statements: “I felt like a failure,” “I felt that I had many good qualities,” “I thought I was no good at all,” and “On the whole, I was satisfied with myself.” Daily scores for the scale were operationalized as the means of the scale items.

Daily depressogenic adjustment was measured with three items based on the Beck’s Cognitive Triad (TRI) (Beck, 1972). This scale contained three questions that measured negative view of the self, “Overall, how positively did you feel about yourself today,” negative view of life in general, “Thinking of your life in general, how well did things go today,” and negative view of the future, “How optimistic are you about how your life (in general) will be tomorrow?” Daily levels of depression were operationalized as the mean of the scale items.

Daily spirituality (SPR) was measured using three items (8, 12, and 22) from the Spiritual Involvement and Beliefs Scale – Revised (SIBS_R) (Hatch et al., 1998). Questions were reworded to refer to how spiritual participants were for that day. Items were “The spiritual part of my life was very important to me,” “ I had joy in my life because of my spirituality,” and “ My personal relationship with a power greater than myself was important to me.” Daily levels of spirituality were operationalized as the mean of the scale items.

Procedure

Participants were introduced to the study in groups of 15-30 across several sessions. They were told that the study concerned their well-being (how they thought and felt about themselves) and spirituality. Participants were instructed that they would need to have access to the Internet every night for two weeks and they would need to provide responses on how they felt in general and for each day. An instruction sheet (see Appendix D) was given to the students containing information about the website, which included how to access the website, register their ID and password and the specific information about how to go through the sections of the study. To ensure that their responses reflected their reactions to their entire day, they were told to respond just before going to bed. If problems arose with the website and participants had to miss a day, they were told to skip that day and continue on to the next day. In addition, participants were told that the date and time of their responses would be recorded, a procedure, that is believed to maintain consistent and accurate responses.

When participants accessed the website (see Appendix E), they were instructed to first log in and register their six digit ID number. After they registered, participants were first told to begin the study by logging into the “Start” section and completing the trait level measures. Participants were informed to log into the “Start” section one time. After completing the “Start” section, participants were instructed to go to the “Today” section and provide responses to the state measures for that day. Participants were to complete the “Today” section for two consecutive weeks. At the end of the study, on day 14, participants were told to finish their role in the study by completing the “Finish” section. In the “Finish” section there were also trait level measures that the participants completed one time.

If there were any questions regarding the experiment and to ensure there were no problems with the study, the experimenter maintained contact with the participants via e-mail and phone. In the current study, participants had only contacted the experimenter if there were problems with accessing the website, if they had forgot their log in ID and/or if they had any questions or concerns regarding their role in the study. At the end of the study, participants were emailed and thanked for their participation.

The data collection programs recorded the time and date of when the participants provided their data. Date and time stamp allowed the experimenters to determine if participants had done what they were told throughout the course of the study. All the data provided by 47 participants were eliminated due to the lack of the appropriate number of days provided for the study. Participants were instructed to complete 14 days and the participants who were eliminated had less than 6 days worth of data. Out of the 47, 2 of

these participants completed most of their data at one sitting. Another 6 of the 47 participants did not complete the required trait level measures. The resulting sample contained 2174 days of data (an average of 13.9 days per participant).

Results

The present data set is comprised of what is referred to as a multilevel data structure in that observations at one level of analysis (days) were nested within another level of analysis (people). The analyses were Multilevel Random Coefficient Models (MRCM) conducted using the program HLM (Raudenbush, Bryk, Cheong, & Congdon, 2000; Version 5). In past multilevel data structure studies, researchers have often used ordinary-least-squares methods; however, such methods provide less accurate parameter estimates than MRCM. MRCM analyzes coefficients at one level of analysis that are analyzed at a second level. In level-1, a regression equation is estimated for each unit of analysis and then the regression equation becomes dependent variables in regression equations at the next level of analysis, which is level-2.

Descriptive Statistics and Correlations of Trait Level Measures for All Participants, African Americans, and European Americans

Descriptive statistics on the trait level measures for All Participants, African Americans, and European Americans show that there were some trait differences between African and European Americans. For self-esteem (RSE), trait level means for African and European Americans were significantly different $t(1, 154) = -2.122, p < .05$. For trait spirituality components, means for African and European Americans were significantly different $t(1, 114) = -4.11, p < .001$ on core spirituality (COR) and means for African

and European Americans were significantly different $t(1, 114) = -3.04, p < .01$ on humility (HUM). On overall spirituality (SPR), which included core spirituality (COR), humility (HUM), existential (EXI), and insight (INS) means for African and European Americans were significantly different $t(1, 114) = -3.469, p < .001$. In contrast, mean (CESD) scores, for African and European Americans were not significantly different $t(1, 154) = .550, p = .583$ and there were no differences on the existential (EXI) ($p = .437$) and insight (INS) ($p = .235$) components of spirituality. All means and standard deviations for All Participants, African Americans, and European Americans are presented in Table 1.

Relationships among self-esteem (RSE), spirituality (SPR), and depression (CESD) were examined for All Participants and for African Americans and European Americans separately. Self-esteem (RSE) was significantly correlated with CESD and INS but not with SPR, COR, HUM, EXI. Spirituality (SPR) did not correlate with any of the other trait level measures. Core spirituality (COR) correlated with EXI, HUM, and INS but not with RSE and CESD. Correlations for All Participants are presented in Table 2.

For African Americans, RSE significantly correlated with CESD but not with any of the four spirituality components (COR, EXI, HUM and INS). Overall spirituality (SPR) did not correlate with any of the other trait level measures. Core spirituality (COR) significantly correlated with EXI only. Correlations for African Americans are presented in Table 2.

For European Americans RSE did not correlate with any of the trait level measures, neither did Overall spirituality (SPR). Core spirituality (COR) was significantly correlated with the other spirituality components (EXI, HUM, and INS) only. Existentialism (EXI) was significantly correlated with (COR, HUM, and INS). Humility (HUM) was significantly correlated with all other spirituality components (COR, EXI, and INS). Insight (INS) significantly correlated with all other spirituality components (COR, EXI, and HUM). All correlations for European Americans are presented in Table 2.

State level descriptive statistics

The first set of analyses examined the reliability and validity of self-esteem (RSE) and depression (TRI) day level measures. However, the validity of spirituality (SPR) was not examined due to too many missing values in the trait level dataset. Reliability analyses were conducted on RSE, TRI, and SPR, positive events, negative events. Reliability models are referred to as ‘totally unconditional’ models because daily measures are not modeled as a function of other day or person level variables. The basic level 1 (day level or within-person) model was:

$$y_{ij} = \beta_{0j} + r_{ij}.$$

In this model, y represents a day-level measure and i represents the observations for j individuals of a continuous variable. In the standard MRCM model, level-1 coefficients are referred to as β s (i.e., means of the intercepts) and are random coefficients representing the mean of y for person j . The r_{ij} term represents error associated with each measure.

In multilevel modeling, level-1 coefficients are analyzed at level-2. The basic level-2 model was:

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

In MRCM, γ_{00} represents the grand mean across j people and the u_{0j} term represents the error (variance) associated with the level-2 analyses. The basic level-2 model is referred to as unconditional because β_{0j} is not modeled as a function of another variable.

The reliability results of RSE, TRI, SPR, and event measures are shown in Table 4. All measures were highly reliable, with all measures at .92 or above. Validity for RSE and TRI was determined by examining the shared variances between the trait and daily measures of the same construct. The following model was used to determine the validity of RSE and TRI. Here, daily measures were modeled as a function of the corresponding trait measures in level-2:

$$\beta_{0j} = \gamma_{00} + \gamma_{01}(\text{TRAIT}) + u_{0j}.$$

The results show that the coefficients between RSE (daily self-esteem and trait self-esteem) were significantly different from 0 ($\gamma_{01} = .77$, $t = 8.67$, $p < .01$). For example, for every 1-point increase in trait self-esteem, daily self-esteem increased .77. Results also indicated that the coefficients between TRI (daily depressogenic states and trait depression) were significantly different from 0 ($\gamma_{01} = -.05$, $t = -6.89$, $p < .01$). For example, for every 1-point increase in trait depression, daily depressogenic states decreased .05.

In the present study, validity coefficients for the daily measures were estimated by examining the random variance for the daily measures and trait measures. For state self-

esteem (RSE), the residual variance at the person level was .578, and the residual variance for trait self-esteem at the second level of analysis was .313. Subtracting .313 from .578 and dividing by .578, results in a 46% reduction. A 46% reduction corresponds to a .68 correlation between mean daily self-esteem and trait self-esteem; therefore, this finding shows that self-esteem has convergent validity. For state depression (TRI), the residual variance at the person level was .570, and the residual variance for trait depression at the second level of analysis was .398. Subtracting .398 from .570 and dividing by .570, results in a 30% reduction. A 30% reduction corresponds to a .55 correlation between state and trait measures of depression; therefore, this finding shows that depression has convergent validity. All summary statistics are presented in Table 3.

Within Person Relationships Between Daily Events and Daily Measures

The first hypothesis in the present study was that self-esteem would positively covary with positive events and negatively covary with negative events. To determine the within-person covariation between daily self-esteem and daily events, the following day level model was used:

$$y_{ij} = \beta_{0j} + \beta_{1j}\text{PosEvent} + \beta_{2j}\text{NegEvent} + r_{ij}$$

In this model, y_{ij} is a state self-esteem score for person j on day i , β_{0j} is a random coefficient representing the intercept for person j , $\beta_{1j}\text{PosEvent}$ is a random coefficient for positive events, $\beta_{2j}\text{NegEvent}$ is a random coefficient for negative events, and r_{ij} represents the error associated with the self-esteem and events slope.

To determine if the event-self-esteem relationships were significantly different from 0 across the individuals in the study, the following person level model was analyzed:

Intercept: $\beta_{0j} = \gamma_{00} + u_{0j}$

Positive events: $\beta_{1j} = \gamma_{10} + u_{1j}$

Negative events: $\beta_{2j} = \gamma_{20} + u_{2j}$

In this model, γ_{00} represents the mean intercept, γ_{10} represents the positive event slope, and γ_{20} represents the negative event slope. Results for the relationships between daily self-esteem and daily positive and negative events supported the study's first hypothesis. The mean daily self-esteem-positive event slope was significantly different from 0 ($\gamma_{10} = .42$, $t = 10.70$, $p < .001$). Results indicate that for every 1-point increase in positive events, state self-esteem increased .42.

In addition, the mean daily self-esteem-negative event slope was significantly different from 0 ($\gamma_{20} = -.62$, $t = -11.48$, $p < .001$). Therefore, for every 1-point increase in negative events, state self-esteem decreased .62.

To determine if the mean slopes between self-esteem and positive events and the mean slopes between self-esteem and negative events were significantly different from one another, a chi-square test was conducted. These analyses found that the self-esteem and positive slope and the self-esteem and negative event slopes were significantly different from each other ($\chi^2(1) = 9.31$, $p < .01$). These results supported the second hypothesis in that the covariation between self-esteem and negative events was stronger (.61) than the covariation between self-esteem and positive events (.42).

For spirituality, spirituality covaried only with positive events, but did not covary with negative events. The relationship between positive events and daily spirituality was significantly different from 0 ($\gamma_{10} = .12$, $t = 2.50$, $p < .05$). Daily spirituality was positively related to positive events. For example, the mean positive event coefficient for daily spirituality was .12, so for every 1-point increase in positive events, daily spirituality increased .12. In contrast, the relationship between negative events and daily spirituality was not significantly different from 0 ($\gamma_{20} = -.05$, $t < 1$).

Analyses of the relationships between daily events and daily depression states showed that the mean depression-positive event slope was significantly different from 0 ($\gamma_{10} = .64$, $t = 13.84$, $p < .001$). For every 1-point increase in positive events, daily depression adjustment increased .63. In addition, the mean depression-negative event slope was also significantly different from 0 ($\gamma_{20} = -.67$, $t = -12.23$, $p < .001$). For every 1-point increase in negative events, daily depression adjustment decreased .67.

To determine if the mean slopes between depression and positive events and the mean slopes between depression and negative events differed, a chi-square was done. Tests of the magnitude of the positive and negative event slopes of depression were not significant and indicated that the covariation between depression and positive events was not stronger and significantly different from the covariation between depression and negative events ($\chi^2(1) < 1$). Results for all within person covariation between daily events and daily measures analyses are presented in Table 4.

Within Person Relationships for Daily Measures and Race

To understand the extent to which the within-person relationships on daily measures varied as a function of race, the following model was used:

$$\beta_{0j} = \gamma_{00} + \gamma_{01}(\text{RACECNT}) + u_{0j}.$$

In this model, RACECNT was coded (1, -1). African Americans were coded as (1) and European Americans were coded as (-1). RACECNT was uncentered.

For the spirituality and race analysis, results suggested that there is a significant race effect for spirituality ($\gamma_{01} = -.79, t = -6.14, p < .001$). Individual daily mean scores for African Americans and European Americans were determined by estimating scores for each group using predicted values from the equation. The sample mean was 4.70, and the RACECNT coefficient was -.79. Daily spirituality means for African Americans ($M = 5.49$) was significantly higher than daily spirituality for European Americans ($M = 3.91$).

For daily self-esteem, there was also a significant race effect ($\gamma_{01} = -.14, t = -2.33, p < .05$). This means that daily self-esteem negatively covaried with race. The sample mean was 5.76, and RACECNT coefficient was -.14. The results show that daily self-esteem is higher and significantly different for African Americans than for European Americans. The daily self-esteem mean for African Americans ($M = 5.90$) and the daily self-esteem mean for European Americans ($M = 5.62$) are significantly different from each other. Thus, these results support the study's third hypothesis in that self-esteem will be higher for African Americans than for European Americans. For daily depression, there was not a race effect. The sample mean was 5.55, and the RACECNT coefficient was -.11. The results show that daily depression mean scores for African Americans and European Americans are not significantly different from each other ($\gamma_{01} = -.11, t = -1.88, p$

> .05). The daily depression mean for African Americans was ($M = 5.66$) and the daily depression mean for European Americans was ($M = 5.44$). All results between daily measures and race are presented in Table 5.

Within Person Relationships Between Daily Measures, Daily Events and Race

To determine if there was a race effect for the relationships between daily measures and daily events the following model was analyzed:

$$y_{ij} = \beta_{0j} + \beta_{1j}\text{PosEvent} + \beta_{2j}\text{NegEvent} + r_{ij}$$

The relationships between daily measures and daily events were then analyzed as a function of race:

Intercept: $\beta_{0j} = \gamma_{00} + \gamma_{01}(\text{RACECNT}) + u_{0j}$

Positive events: $\beta_{1j} = \gamma_{10} + \gamma_{11}(\text{RACECNT}) + u_{1j}$

Negative events: $\beta_{2j} = \gamma_{20} + \gamma_{21}(\text{RACECNT}) + u_{2j}$

For state level self-esteem, there was no race effect on the positive event-self-esteem slope ($\gamma_{11} = -.01$, $t = -0.357$, $p > .5$), but there was a marginally significant race effect on the negative event-self-esteem slope. ($\gamma_{21} = -.10$, $t = -1.87$, $p = .061$). The daily positive events-self-esteem mean was .43 and the negative events-self-esteem mean was -.61. For African Americans, the daily self-esteem mean was 5.90, daily positive events-self-esteem mean was .44, and daily negative events-self-esteem mean was -.51. For European Americans, the daily self-esteem mean was 5.62, daily positive events-self-esteem mean was .42, and daily negative events-self-esteem mean was -.71.

For state level spirituality, there was no race effect on the positive event-spirituality slope ($\gamma_{11} = -.05$, $t = 1.098$, $p > .5$), but there was a race effect on the negative

event-spirituality slope relationship ($\gamma_{21} = .11$, $t = 2.10$, $p < .05$). Daily positive event-spirituality mean was .11 and negative events-self-esteem mean was -.07. For African Americans, the daily spirituality mean was 5.49, daily positive events-spirituality mean was .06, and daily negative events-spirituality mean was -.18. For European Americans, the daily spirituality mean was 3.91, daily positive events-spirituality mean was .16, and daily negative events-spirituality mean was .04.

For state level depression, there was no race effect on the positive events-depression slope ($\gamma_{11} = .06$, $t = 1.403$, $p > .5$), and the negative events-depression slope ($\gamma_{21} = -.08$, $t = -1.57$, $p > .5$). Daily positive events-depression mean was .63, and negative events-depression mean was -.66. For African Americans, the daily depression mean was 5.55, daily positive events-depression mean was .57, and daily negative events-depression mean was -.58. For European Americans, the daily depression mean was 5.44, daily positive events-depression mean was .69, and daily negative events-depression mean was -.74. Results for all relationships between daily measures, daily events, and race are presented in Table 6.

Within-Person Relationships Between Daily Spirituality and Daily Self-esteem

To analyze whether spirituality varied as a function of self-esteem the following model was analyzed:

$$y_{ij} = \beta_{0j} + \beta_{1j}RSE + r_{ij}$$

To determine if the spirituality-self-esteem slope was significantly different from 0, the following model was used:

Intercept: $\beta_{0j} = \gamma_{00} + u_{0j}$

Self-esteem: $\beta_{1j} = \gamma_{10} + u_{1j}$

The sample mean for spirituality was 4.58 and the self-esteem coefficient was .19. Results show that the spirituality-self-esteem slope is significantly different from 0 ($\gamma_{10} = .19, t = 4.86, p < .000$). Thus, the study's fourth hypothesis was supported by the analyses on spirituality and self-esteem in that spirituality positively covaried with self-esteem. For every 1-point increase in self-esteem, spirituality increased .18. Results are presented in Table 7.

Within-Person Relationships Between Daily Spirituality, Daily Self-esteem and Race

To determine if the relationship between spirituality and self-esteem varied as a function of race, the following person level model was used:

Intercept: $\beta_{0j} = \gamma_{00} + \gamma_{01}(\text{RACECNT}) + u_{0j}$

Self-esteem: $\beta_{1j} = \gamma_{10} + \gamma_{11}(\text{RACECNT}) + u_{1j}$

Results indicate that there was not a race effect on the self-esteem-spirituality slope ($\gamma_{11} = -.03, t = -.88, p = .38$). Therefore, the self-esteem and spirituality slopes did not vary as a function of whether one was African American or European American. The fifth hypothesis was not supported by these results.

Traits as Moderators of Event Slopes for Daily Measures

Once the within-person relationships between daily events and daily psychological states are examined, a common next step is an analysis on how traits moderate the within-person relationships between daily events and daily psychological states. To determine moderating effects of the relationships between daily psychological

states and daily events varied as a function of trait depression and trait self-esteem the following person level model was analyzed:

Intercept: $\beta_{0j} = \gamma_{00} + \gamma_{01}(\text{TRAIT}) + u_{0j}$

Positive events: $\beta_{1j} = \gamma_{10} + \gamma_{11}(\text{TRAIT}) + u_{1j}$

Negative events: $\beta_{2j} = \gamma_{20} + \gamma_{21}(\text{TRAIT}) + u_{2j}$

In this first analysis, to test whether trait self-esteem moderated the daily self-esteem-event relationships the model above was analyzed. For daily self-esteem, trait self-esteem moderated the positive event slope ($\gamma_{11} = -.22$, $t = -3.230$, $p < .05$). For state self-esteem, a 1-point increase in RSE scores was associated with a .22 decrease in positive event slopes. The mean positive event slope was .43 and the SD for trait self-esteem was .67. Therefore, the predicted positive events slope for a person 1 SD above the mean on self-esteem was .28 ($-.15 + .43$) and for a person 1 SD below the mean on self-esteem was $-.58$ ($-.15 - .43$). However, trait self-esteem did not moderate the self-esteem-negative event relationship.

For state depression, trait self-esteem (RSE) also moderated the daily positive event slope ($\gamma_{11} = -.21$, $t = -3.189$, $p < .05$). For state depression, a 1-point increase in RSE scores was associated with a .21 decrease in positive event slopes. The mean positive event slope was .64. Therefore, the predicted positive events slope for a person 1 SD above the mean on depression was .50 ($-.14 + .64$) and for a person 1 SD below the mean of depression was $-.78$ ($-.14 - .64$). Trait self-esteem did not moderate the depression-negative event relationship. There was no moderating effect of trait self-esteem on the spirituality daily positive and negative event slopes.

For depression, trait depression moderated the positive event slope ($\gamma_{11} = .02$, $t = 3.573$, $p < .05$). For state depression, a 1-point increase in trait depression scores was associated with a .02 increase in positive event slopes. The mean positive event slope was .64 and the mean for trait depression was 8.51. Therefore, the predicted positive events slope for a person 1 SD above the mean on depression was .81 (.17 + .64) and for a person 1 SD below the mean on depression was -.47 (.17 - .64).

Depression also moderated the self-esteem-positive event relationship ($\gamma_{11} = .01$, $t = 3.015$, $p < .05$). For self-esteem, a 1-point increase in trait depression scores was associated with a .01 increase in positive event slopes. The mean positive event slope was .43. Therefore, the predicted positive events slope for a person 1 SD above the mean on trait depression was .52 (.09 + .43) and for a person 1 SD below the mean on depression was -.34 (.09 - .43).

Depression moderated the spirituality-negative event relationship ($\gamma_{21} = .01$, $t = 2.195$, $p < .05$). For state spirituality, a 1-point increase in trait depression scores was associated with a .01 decrease in negative event slopes. The mean negative event slope was -.07. Therefore, the predicted negative event slope for a person 1 SD above the mean on trait depression was .02 (.09 + -.07) and for a person 1 SD below the mean on depression was .16 (.09 - -.07). Trait depression did not moderate the depression-negative event relationship, the self-esteem-negative event relationship and the spirituality-positive event relationship. Results for all moderating effects are presented in Table 8, predicted values for moderating effects of trait depression on daily measures are

presented in Table 9 and predicted values for moderating effects of trait self-esteem on daily measures are presented in Table 10.

Discussion

The focus of the present study was to investigate the within-person relationships between daily events and daily psychological states and individual differences in such within-person relationships in African Americans and European Americans. Four out of the five hypotheses were confirmed. The first analyses were conducted to determine the trait measures mean scores for African Americans and European Americans. Results show that self-esteem, core spirituality, humility and overall spirituality mean scores were significantly higher for African Americans than European Americans. However there were no significant differences for African Americans and European Americans on depression, existentialism, and insight.

The first hypothesis was that daily self-esteem would positively covary with positive events and negatively covary with negative events. As predicted, on days when more positive events occurred self-esteem went up and on days when more negative events occurred self-esteem went down, and a chi-square test indicated that the self-esteem-positive event and self-esteem-negative event slopes were significantly different.

Researchers have consistently found that self-esteem-positive event slopes and self-esteem-negative event slopes are significantly different from each other (Nezlek & Gable, in press; Nezlek & Plesko, 2001; Nezlek et al., 2001; Rhodewalt, Madrian, & Cheney, 1998). Thus, the second hypothesis was that the covariation between self-esteem and negative events would be significantly different and stronger than the covariation

between self-esteem and positive events. Findings confirmed this hypothesis in that the covariation between self-esteem and negative events was significantly stronger than the covariation between self-esteem and positive events. Findings for hypotheses 1 and 2 are consistent with results of other daily event and self-esteem studies (Butler et al., 1994; David et al., 1997; Greenier et al., 1999; Nezlek & Gable, in press; Nezlek & Plesko, 2001).

One possible limitation for investigating college participants with the DES is that college participant's daily self-esteem and daily depression mean scores might not adequately reflect a student's experience of all possible events. As a result, other non-listed events might contribute to daily self-esteem and daily depression mean scores. For example, other negative events not included on the DES and that could have been experienced are job loss, death, family concerns and issues, etc... Therefore, careful consideration should be given when interpreting scores on daily self-esteem and daily depression based on the DES events experienced. For the most part, however, events in this study cover a wide variety of event options for college participants on any given day. A possible suggestion for future research could be to investigate other positive and negative event issues in addition to those listed on the DES.

Race and Self-esteem

A primary goal of this study was to examine relationships between daily events and daily psychological states for African Americans and European Americans. The third hypothesis was that African Americans would be higher in self-esteem than European Americans. Although previous research has found higher levels of self-esteem

in African Americans at the trait level, no study has investigated higher self-esteem in African Americans than European Americans at the state level. The analyses found that African Americans were higher in state self-esteem. The African American daily self-esteem mean was significantly different from the mean for European Americans. These findings coincide with previous literature findings in that African Americans exhibit higher levels of self-esteem than European Americans (Crocker & Lawrence, 1999; Crocker & Major, 1989; Hoelter, 1983; Major & Schmader, 1998; Rosenberg, 1979; Tashakkori & Thompson, 1991; Wade et al., 1989).

At one point in time research found that African Americans were lower in self-esteem than European Americans. Mainly due to the devaluation, discrimination, and prejudice once seen in non-minorities for African Americans, African Americans had lower self-esteem. In recent research, however, findings show that African Americans are now equal to or higher in self-esteem than European Americans. Some researchers believe that self-esteem is based on the reflected appraisals of other similar cultural groups (Mead, 1934; Rosenberg, 1965; Rosenberg, 1967; Quinn & Crocker, 1998), where higher self-esteem in African Americans is attributed to them around a similar cultural group and not a different cultural group. Furthermore, if an individual belongs to a social group held in high (or low) self-esteem, then the individual's self-esteem will correspond in a significant way (Mruk, 1990). Rosenberg (1965), a pioneer in self-esteem research, believed that the self is a social construction and that self-esteem arises from interplay of cultural, social, familial, and other interpersonal processes (Mruk, 1990). In other words, the social environment is one of the main determinants in how an individual's self-esteem

is created and maintained. Despite all information on African Americans higher in self-esteem than European Americans, some studies have suggested that African Americans are not higher but may be lower in self-esteem (Brown, 1998; Parham & Helms, 1985).

Although this study does not suggest that African Americans have lower compared self-esteem than European Americans, one supporting study shows that when race is investigated in a specific context, African Americans could have lower self-esteem (Martinez & Dukes, 1991). For example, studies on the public vs. private domains and race and studies on African Americans at European American dominated universities vs. African Americans at African American dominated institution. According to Mruk (1990) when a disadvantaged group of people share the same environment with a dominant majority group and when discriminatory social factors limit the former in the pursuit of similar goals, then their self-esteem suffers. Hence, African Americans could be lower in self-esteem. However, there was no reason to believe that African Americans would be lower because even with conflicting evidence on race and self-esteem, in this study, university differences, SES differences, and demographic differences (class and age distribution) were controlled.

Spirituality, Daily Measures and Race

The fourth hypothesis was that spirituality would positively covary with self-esteem. Results confirmed the fourth hypothesis in that spirituality positively covaried with self-esteem; when scores on spirituality went up, scores on self-esteem also went up. Support for this finding was provided by Pederson (1998) who found that individuals with high perceived self-esteem had high spiritual self-identity compared to those who

did not have high perceived self-esteem. Thus, the more spiritual a person is, the more likely they will be higher in self-esteem. When race was added to form the study's fifth hypothesis, there was no race effect on the spirituality-self-esteem slope. This analysis was conducted and ruled out any race differences in spirituality and self-esteem covariations.

The race and spirituality analysis indicated that African Americans are higher in spirituality than European Americans. Not surprisingly, many studies of spirituality have found that African Americans are higher in spirituality than European Americans (Blaine & Crocker, 1995; Crocker & Major, 1998; Crocker & Lawrence, 1999). Furthermore, spirituality is considered a cultural tenet for most people of African ancestry; yet, spirituality is not counted among the core orientations of Anglo-American culture (see Jagers & Smith, 1996; Ani, 1994; Baldwin & Hopkins, 1990; Boykin, 1983; DuBois, 1973). Throughout history, African Americans have used their spiritual beliefs as a means for coping with life circumstances and for guidance. For instance, when slavery existed in America, slaves often had no sense of hope and direction in life except when they called on a greater being to help in alleviating troubling times. Often at times, this alleviation was done with spiritual hymns, dances, and reading of the Bible scriptures (Jules-Rosette, 1980). Because of the early spiritual practices, spirituality has become one of the primary coping mechanisms for African Americans (Paris, 1995). In other words, African Americans probably have a greater need for spirituality than most other cultural groups.

As for spirituality and daily events, no literature to date has provided information on how daily mean levels of spirituality covary with positive and negative events. Therefore, the spirituality and daily event analyses were conducted for exploratory purposes. The analyses found that spirituality positively covaried with positive events but did not covary with negative events. Thus, when good things happen to people in life their spiritual levels increase unlike when bad things happen. A reason behind this is that individuals with higher spirituality levels might depend on their faith to bring him or her through the uneventful situation(s) and see better in positive events than in negative events.

When the race coefficient (RACECNT) was added to the spirituality-events equation there was a significant race effect on the spirituality-negative event slope. For African Americans, the spirituality-negative event slope was smaller but stronger than the spirituality-negative event slope for European Americans. Although there is no known literature to support this finding, the results suggest that spiritual African Americans react less to negative events that occur than spiritual European Americans who react more to negative events. Reason behind this finding could also be due to spiritual individuals do not worry about the negative life events and do not consider them a relevant part of life. In addition, when negative life events occur, spiritual beings often attribute their occurrences to an effect of a higher being. In other words, God is in control of everything and there is a reason for everything.

Depression, Daily Events and Race

Daily depression was tested to determine whether depression covaried with daily events. Although depression relationships in the present study were not hypothesized, they were examined for exploratory purposes. In this study, depression was found to positively covary with positive events and negatively covary with negative events. In support of previous research on depression and daily events, these findings were quite robust. Previous research suggests that those who are depressed react more strongly to positive events than negative events (Nezlek & Gable, in press). In other words, those with higher depression scores see positive events as a sign of something good happening to them. As theorized by researchers, one of the reasons why those with higher depression scores react more to positive events than negative events could be that these people have a weaker sense of self (Rogers, 1961).

Analyses found that there was no race effect for daily depression. This finding supports previous literature on depression and race in that African and European Americans do not significantly differ from each other on depression (Jung & Khalsa, 1989; Lester & DeSimone, 1995; Rosenthal & Schreiner, 2000). However, there was a race effect on the depression-positive event slope. African Americans had a higher mean coefficient (.33) than did European Americans (.03). Thus, the positive event-depression slope was stronger for African Americans than for European Americans. African Americans therefore reacted more to the positive events that occurred than European Americans.

Moderating effects of trait measures on state measures

In past studies on moderating variables, researchers have studied trait depression (e.g., CESD) moderating effects on daily measures and daily events. In the present study, the moderating effects of CESD on daily self-esteem, daily depression, and daily spirituality were examined. For daily depression, CESD moderated the positive event slope only. People who were more depressed reacted more strongly to positive events than less depressed people. This finding is consistent with past research on CESD moderating reactions to positive events (Butler et al, 1994; Nezlek & Gable, in press).

For state self-esteem, CESD moderated the positive event slope. When depression scores went up, so did the self-esteem-positive event slope. Individuals that are more depressed reacted more to the positive event slope than less depressed people. For these analyses, depressed individuals may also find meaning in the positive events experienced more than less depressed individuals. Moreover, when a depressed individual feels good on a day with more positive events they react more than a less depressed person who has the same type of day.

For state spirituality, trait depression moderated the negative event slope but not the positive event slope. When trait depression scores went up, so did the spirituality-negative event slope. Less depressed people had stronger reactions to the spirituality-negative event slope than more depressed people. One possible reason for this finding could be that spirituality is a significant part of one's well-being and usually depressed individuals are not high in spirituality. Therefore, if a person is high in depression and spiritual they react less to the negative events that occur; whereas, if a person is low in

depression and spiritual they react more to the negative events that occur. Maybe people higher in spirituality do not count negative events as a threat to their well-being.

For state self-esteem, trait self-esteem (RSE) moderated the positive event slope. When trait self-esteem scores went up, the state self-esteem-positive event slope went down. People who were higher in self-esteem reacted less to positive events than people who were lower in self-esteem. This finding makes sense in that higher self-esteem individuals do in fact experience more positive than negative events. Therefore, higher self-esteem individuals are more accustomed to everyday positive event occurrences and react less to positive events than individuals lower in self-esteem.

For state depression, trait self-esteem (RSE) moderated the positive event slope. When trait self-esteem scores went up, the state depression-positive event slope went up. People who are higher in self-esteem reacted less to positive events than people lower in self-esteem. This finding is consistent with the other moderating effects in that individuals higher in self-esteem tend to find less meaning in positive events than those who are lower in self-esteem. When positive events occur, lower self-esteem people see these as a sign of something good, which boosts their self-esteem.

Limitations

One major limitation for this study is the sample size was somewhat small. In the beginning of the study, approximately 200 participants expressed interest in participating. Due to the demands of partaking in a two-week diary study, many of the participants could and did not complete their role. Consequently, some participants would skip several days and/or enter all their days in one sitting. Thus, some of their data could not

be used in the analyses. Lack of Internet accessibility at one of the major universities was another major contributing factor for participants not completing their role. Because of poor student participation, the end sample size for all participants was about half of the total participant pool. One suggestion for future studies is that participants can be pooled from schools with similar Internet capabilities, floppy disks could be provided for the participants to record their responses and researchers can select schools with similar research values and beliefs.

All the collected data could not be analyzed and thus created another limitation for this study. Originally, trait spirituality was going to be a moderating variable of self-esteem and depression relationships; however, not enough participants completed the trait level spirituality measure. In addition, no moderating analyses of extraversion and neuroticism variables were conducted because not enough participants completed the trait level measures of those variables. As a result, spirituality, extraversion, and neuroticism could not be modeled properly for HLM analyses and were not included in the trait level-2 analyses. For spirituality, neuroticism and extraversion participants simply forgot to complete these measures at the end of the study. Therefore, one suggestion for future studies is that all participants complete all trait measures in the beginning of the study via Internet or by means of paper and pencil.

Finally, another limitation to studying race and psychological adjustment issues is that for the present study African Americans and European Americans had similar SES and university traits. However, if you were to apply these same results and generalize across all college African and European Americans that would not be possible. SES has

a major role in self-esteem, depression, and possibly spirituality. Participants attending a less prestigious university or one with lower high in standards could display differences in self-esteem, depression, and spirituality. Therefore, for future studies on race, daily events, and psychological adjustment, a variety of university types should be sampled to compare and contrast African and European Americans.

Future directions and implications

A few implications for studying self-esteem and race need to be addressed. First, there should be some caution when interpreting self-esteem results on African and European Americans. For instance, African Americans tend to believe in a collectivistic society; whereas European Americans believe in individualism, therefore these two cultural groups may base their self-esteem on different cultural values (White, 1984; Jenkins, 1995). If this theory is true and how we feel is based on the reflected appraisals of each other, then maybe beliefs in individualism and collectivism should be controlled before running self-esteem analyses. If this is done, there is a great chance that African and European Americans could exhibit similarities in self-esteem.

Another implication to studying self-esteem and race is that the self-esteem of African Americans at a predominately African American university and the self-esteem of African Americans at a predominately European American university could be based off two different types of environments. For instance, if self-esteem formation and maintenance depends on the environment in which the person lives, then results suggesting higher self-esteem in African Americans than in European Americans in this study is justified. Whereas, if this sample consisted of African Americans from a

predominately European American university, then self-esteem results could be different. One suggestion for future studies with the type of research mentioned is that the self-esteem of African Americans at European and African American universities and the self-esteem of European Americans at European and African American universities be compared after controlling for university differences, SES, and demographic differences.

In addition, this study measured global self-esteem and not domain specific self-esteem. Because past studies have indicated that African and European Americans base their self-esteem on different contingencies, further researching these individual contingencies and discovering specific differences or similarities in self-esteem would be interesting. Finally, studies on in-group vs. out-group comparisons of self-esteem are warranted for future investigation. For instance, Tesser's (1986; 1988) self evaluation maintenance (SEM) model asserts that psychological closeness has a major role in self-evaluation when comparing oneself to another. In other words, African Americans might have differing levels of self-esteem when they compare themselves to other African Americans vs. when they compare themselves to European Americans. As could be the same for European Americans, they might have differing levels of self-esteem when they compare themselves to other European Americans vs. when they compare themselves to African Americans. When individuals compare themselves to a close other, the greater the threat is to a person's self-evaluation (Tesser, 1986; 1988).

In a future study on African Americans and European Americans it would be interesting to discover in depth similarities and differences in two not so homogenous cultural groups using the suggestions previously mentioned.

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Table 1

Means, Standard Deviations for All Trait Measures

<u>Measures</u>	<u>Overall Sample</u>	<u>African Americans</u>	<u>European Americans</u>	<u>T-ratio</u>
Self-esteem				
<u>M</u>	4.12*	4.25*	4.02*	-2.122
<u>SD</u>	.674	.59	.72	
Depression				
<u>M</u>	14.61	14.18	14.93	.550
<u>SD</u>	8.45	7.99	8.82	
Spirituality				
<u>M</u>	5.03**	5.39**	4.86**	-3.469
<u>SD</u>	.817	.615	.849	
Core spirituality				
<u>M</u>	4.95**	5.68**	4.59**	-4.110
<u>SD</u>	1.43	1.09	1.45	
Existentialism				
<u>M</u>	5.34	5.43	5.29	-.780
<u>SD</u>	.90	.83	.94	
Humility				
<u>M</u>	5.09*	5.49*	4.90*	-3.04
<u>SD</u>	1.01	1.13	.90	
Insight				
<u>M</u>	4.65	4.97	4.65	-1.195
<u>SD</u>	1.43	1.17	1.43	

Note:

** $p < .01$ * $p < .05$

Table 2

Correlations of Trait Level Measures for All Participants (African Americans and European Americans)

		CESD	SPR	COR	EXI	HUM	INS
RSE	Overall	-.70**	.10	.00	.09	.01	.18*
	Af-Am	-.75**	.01	-.20	.00	.02	.20
	Eu-Am	-.69**	.08	-.01	.11	-.05	.16
CESD	Overall		-.03	.02	-.08	.00	-.05
	Af-Am		.08	.11	.17	-.13	.07
	Eu-Am		.06	-.00	-.17	.09	-.08
SPR	Overall			.75**	.73**	.61**	.67**
	Af-Am			.62**	.78**	.59**	.40**
	Eu-Am			.75**	.74**	.60**	.75**
COR	Overall				.47**	.33**	.21*
	Af-Am				.47**	.23	-.17
	Eu-Am				.47**	.28*	.28*
EXI	Overall					.31**	.38**
	Af-Am					.31	.21
	Eu-Am					.31**	.44**
HUM	Overall						.18
	Af-Am						-.15
	Eu-Am						.31**
INS	Overall						
	Af-Am						
	Eu-Am						

Note:

** $p < .01$

* $p < .05$

Table 3

Summary Statistics of Daily Measures

Measure	Day-level mean	Day-level <u>SD</u>	Reliability	Validity
Self-esteem	5.74	.76	.93	.68
Triad Measure	5.54	.75	.92	.55
Spirituality	4.59	1.82	.98	
Positive events	1.51	.66	.95	
Negative events	2.72	.77	.92	

Table 4

Within Person Relationships Between Daily Events and Daily Measures

Measure	Intercept	Positive Events	Negative Events
Self-esteem	5.74	.42**	-.62**
Triad Measure	5.54	.64**	-.67**
Spirituality	4.59	.12*	-.05

Note:

** $p \leq .001$ * $p \leq .05$

Table 5

Within Person Relationships Between Daily Measures and Race

Measure	Intercept	RACECNT	African Am.	European Am.
Self-esteem	5.76**	-.14*	5.90	5.62
Triad Measure	5.55**	-.12	5.67	5.43
Spirituality	4.70**	-.79**	5.49	3.91

Note:

** $p \leq .001$ * $p \leq .05$

Table 6

Within Person Relationships Between Daily Measures, Daily Events and Race

		Event Slopes		
Trait Measure	Daily Measure	Intercept	Positive	Negative
<hr/>				
<u>Mean</u>				
	Self-esteem	5.76*	.43	-.61
	Triad Measure	5.55	.63	-.66
	Spirituality	4.70*	.11	-.07
<u>African Americans</u>				
	Self-esteem	5.90*	.44	-.51
	Triad Measure	5.66	.57	-.58
	Spirituality	5.49*	.06	-.18*
<u>European Americans</u>				
	Self-esteem	5.62*	.42	-.71
	Triad Measure	5.44	.69	-.74
	Spirituality	3.91*	.16	.04*

Note:

** $p \leq .005$ * $p \leq .05$

Table 7

Within Person Relationships Between Daily Spirituality and Daily Self-esteem

Daily Measure	Intercept	Self-esteem
Spirituality	4.59**	.18**
T-Ratio	31.19	4.62
P-Value	.000	.000

Note:

** $p \leq .001$ * $p \leq .05$

Table 8

Traits as Moderators of Event Slopes for Daily Measures

			Event Slopes	
Trait Measure	Daily Measure	Intercept	Positive	Negative
<u>Self-esteem</u>				
	Self-esteem	.76**	-.22*	.06
	Triad Measure	.64**	-.21*	.05
	Spirituality	.17	.04	-.11
<u>Depression</u>				
	Self-esteem	-.05**	.01*	-.00
	Triad Measure	-.05**	.02**	-.00
	Spirituality	-.02	-.01	.01*

Note:

** $p \leq .001$ * $p \leq .05$

Table 9

Predicted Values Illustrating Trait Depression Moderated Daily Measures

Measures	Event Slopes		
	Intercept	Positive	Negative
<u>Trait Depression and Daily Depression</u>			
Low CESD (-1 <u>SD</u>)	5.59*	-.47*	-.68
Mean CESD	5.54*	.64*	-.68
High CESD (+1 <u>SD</u>)	5.49*	.81*	-.68
<u>Trait Depression and Daily Self-esteem</u>			
Low CESD (-1 <u>SD</u>)	5.79*	-.34*	-.62
Mean CESD	5.74*	.43*	-.62
High CESD (+1 <u>SD</u>)	5.69*	.52*	-.62
<u>Trait Depression and Daily Spirituality</u>			
Low CESD (-1 <u>SD</u>)	4.61	-.21	.16*
Mean CESD	4.59	.12	-.07*
High CESD (+1 <u>SD</u>)	4.57	.03	-.02*

Note: coefficients marked with * were significantly different from 0 at the .05 level or beyond

Table 10

Predicted Values Illustrating Trait Self-esteem Moderated Daily Measures

Measures	Intercept	Event Slopes	
		Positive	Negative
<u>Trait Self-esteem and Daily Self-esteem</u>			
Low RSE (-1 <u>SD</u>)	4.98*	-.58*	-.58
Mean RSE	5.74*	.43*	-.62
High RSE (+1 <u>SD</u>)	6.50*	-.28*	.66
<u>Trait Self-esteem and Daily Depression</u>			
Low RSE (-1 <u>SD</u>)	4.90*	-.78*	.71
Mean RSE	5.54*	.64*	-.68
High RSE (+1 <u>SD</u>)	6.18*	.50*	-.65
<u>Trait Self-esteem and Daily Spirituality</u>			
Low RSE (-1 <u>SD</u>)	4.42	-.09	.00
Mean RSE	4.58	.12	-.07
High RSE (+1 <u>SD</u>)	4.76	.15	-.14

Note: coefficients marked with * were significantly different from 0 at the .05 level or beyond

Rosenberg Self-Esteem Scale

Please read each statement and consider how much you TYPICALLY AND GENERALLY agree or disagree. Use the following scale:

1. SD – Strongly disagree
2. D – Disagree
3. N – Neither agree nor disagree
4. A – Agree
5. SA – Strongly agree

1. I feel that I am a person of worth, at least on an equal plane with others.
2. I feel like a person who has a number of good qualities.
3. All in all, I am inclined to feel like a failure.
4. I feel as if I am able to do things as well as most other people.
5. I feel as if I do not have much to be proud of.
6. I take a positive attitude towards myself.
7. On the whole, I am satisfied with myself.
8. I wish that I could have more respect for myself.
9. I certainly feel useless at times.
10. At times I think I am no good at all.

Center for Epidemiological Studies- Depression Scale (CES-D)

Below is a list of the ways you might have felt or behaved. Please indicate how often you felt this way during the past week using the following scale.

- 0 – Rarely less than a day
- 1 – Some 1-2 days
- 2 – Moderately 3-4 days
- 3 – Mostly 5-7 days

1. I was bothered by things that usually don't bother me.
2. I did not feel like eating; my appetite was poor.
3. I felt that I could not shake off the blues even with help from my family or friends.
4. I felt that I was just as good as other people.
5. I had trouble keeping my mind on what I was doing.
6. I felt depressed.
7. I felt that everything I did was an effort.
8. I felt hopeful about the future.
9. I thought my life had been a failure.
10. I felt fearful.
11. My sleep was restless.
12. I was happy.
13. I talked less than usual.
14. I felt lonely.
15. People were unfriendly.
16. I enjoyed life.
17. I had crying spells.
18. I felt sad.
19. I felt that people dislike me.
20. I could not get 'going.'

Spiritual Involvement and Beliefs Scale - Revised (SIBS-R)

For each of the following statements, indicate your level of agreement or disagreement by choosing a number from 1-7, with 1 meaning you strongly disagree with the statement and 7 meaning you strongly agree with the statement.

1. SD – Strongly disagree
2. D – Disagree
3. MD – Mildly disagree
4. N – Neutral
5. MA – Mildly agree
6. A – Agree
7. SA – Strongly agree

1. I set aside time for meditation and/or self-reflection. (COR)
2. I can find meaning in times of hardship. (COR)
3. A person can be fulfilled without pursuing an active spiritual life. (COR)
4. I find serenity by accepting things as they are. (INS)
5. I have a relationship with someone I can turn to for spiritual guidance. (COR)
6. Prayers do not really change what happens. (COR)
7. In times of despair I can find little reason to hope. (EXI)
8. I have a personal relationship with a power greater than myself. (COR)
9. I have had spiritual experiences that have greatly changed my life. (COR)
10. When I help others I expect nothing in return. (HUM)
11. I don't take time to appreciate nature. (EXI)
12. I have joy in my life because of my spirituality. (COR)
13. My relationship with a higher power helps me love others more completely. (COR)
14. Spiritual writings enrich my life. (COR)
15. I have experienced healing after prayer. (COR)
16. My spiritual understanding continues to grow. (COR)
17. I focus on what needs to be changed in me, not what needs to be changed in others. (HUM)
18. In difficult times I am still grateful. (COR)
19. I have been through a time of great suffering that lead to spiritual growth. (COR)
20. I solve problems without using spiritual resources. (COR)
21. I examine my ideas to see if they reflect my values. (EXI)
22. I am a spiritual person. (COR)

Appendix B

Daily Event Scale (DES)

Describe the events that occurred to you today. If the event did not occur, enter a 0. If the event did occur, describe how important or meaningful it was. Use the following scale to describe what happened today:

- 0 = did not happen
- 1 = not very important or meaningful
- 2 = somewhat important/meaningful
- 3 = important/meaningful
- 4 = very important/meaningful

1. Had especially good interactions with friend(s) or acquaintances.
2. Completed work on an interesting project or assignment.
3. Did poorly on schoolwork task (e.g., test, assignment, job duty).
4. Did something awkward or embarrassing in a social situation.
5. Was excluded or left out by my group of friends.
6. Fell behind in coursework or duties.
7. Went out socializing with friends/date (e.g., party, dance clubs).
8. Met a daily fitness goal.
9. Had especially good interactions with my steady date.
10. Performed well (sports, music, speaking, drama, etc.).
11. A disagreement with a close friend or steady date was left unresolved.
12. Classmate, teacher, co-worker, or friend criticized me or my abilities.
13. Did something special for a friend/steady date which was appreciated.
14. Flirted with someone or arranged a date.
15. Got caught up (or ahead) in coursework or work duties.
16. Got along poorly with peers (e.g., classmates, co-workers, roommates).
17. Failed to meet a daily fitness goal.
18. Classmate, teacher, co-worker, or friend complimented me on my abilities.
19. Went out to eat with a friend/date.
20. Tried to do homework and couldn't understand it.
21. Did well on a school or work task (e.g., test, assignment, job duty).
22. Had plans fall through to spend time with someone special.
23. Had other type of pleasant event (not listed above) with friends, family, or date.
24. Had other type of unpleasant event (not listed above) with friends, family, or date.
25. Had other type of pleasant event (not listed above) concerning performance at school, work, or another activity.
26. Had other type of unpleasant event (not listed above) concerning school work, or another activity.

Rosenberg Self-Esteem Scale (Modified)

Use the following scale for the set of questions below:

1. Very characteristic of me today.
2. Uncharacteristic of me today.
3. Somewhat uncharacteristic of me today.
4. Neither characteristic nor characteristic of me today.
5. Somewhat characteristic of me today.
6. Characteristic of me today.
7. Very characteristic of me today.

1. I felt like a failure.
2. I felt that I had many good qualities.
3. I thought I was not good at all.
4. On the whole, I was satisfied with myself.

Daily Measure of Cognitive Triad

1. Overall, how positively did you feel about yourself today?

- 1=very negatively
- 2=negatively
- 3=somewhat negatively
- 4=neither negatively nor positively
- 5=somewhat positively
- 6=positively
- 7=very positively

2. Thinking of your life in general, how well did things go today?

- 1=very poorly
- 2=poorly
- 3=somewhat poorly
- 4=neither poorly nor well
- 5=somewhat well
- 6=well
- 7=very well

3. How optimistic are you about how your life (in general) will be tomorrow?

- 1=very pessimistic
- 2=pessimistic
- 3=somewhat pessimistic
- 4=neither pessimistic nor optimistic
- 5=somewhat optimistic
- 6=optimistic
- 7=very optimistic

Physically Attractive Question

4. Thinking of today only, how physically attractive do you think other people thought you were?

- 1=very unattractive
- 2=moderately unattractive
- 3=somewhat unattractive
- 4=neither unattractive nor attractive
- 5=somewhat attractive
- 6=moderately attractive
- 7=very attractive

Spiritual Involvement and Beliefs Scale – Revised (SIBS-R) (Modified)

Use the following scale for the set of questions below:

1. Very uncharacteristic of me today.
 2. Uncharacteristic of me today.
 3. Somewhat uncharacteristic of me today.
 4. Neither characteristic nor characteristic of me today.
 5. Somewhat characteristic of me today.
 6. Characteristic of me today.
 7. Very characteristic of me today.
-
1. The spiritual part of my life was very important to me.
 2. I had joy in my life because of my spirituality.
 3. My personal relationship with a power greater than myself was important to me.

Appendix C

College of William and Mary and Hampton University

Psychology Department Consent Form

The general nature of this study on Exploring Cultural Specificity in Spirituality and Psychological Adjustment to Daily Events and Plans conducted by Monica Allen has been explained to me. The purpose of the current research project is to understand spirituality and adjustment to daily events across time. I understand that I will be asked to provide information on my psychological adjustment to daily events and plans. I further understand that my confidentiality will be preserved and that my name will not be associated with my responses or any results of this study that will be in the final report. I further understand that my results to be collected via Internet will be obtained through a secured website that only the researchers can access. I understand that those researchers are Monica Allen and John Nezlek (the Masters student's advisor). I understand that the length of the current study will be approximately 3-4 weeks. I also understand that I have been explained the full procedure of the study. I know that I may refuse to answer any question asked and that I may discontinue participation at any time. I understand that there will be no risks or discomforts made to me while participating in this study. I understand that by answering the questions I may gain insight that could have an effect on how I will be thinking about situations and events I experience. I also understand that any grade, payment, or credit for participation will not be affected by my responses or by my exercising of any of my rights. I am also aware that I may report dissatisfactions with any aspect of this experiment to the psychology Department Chair (Hampton University 727-5301 and The College of William and Mary 221-3875). I am aware that I must be at least 18 years of age to participate. I am also aware that Monica Allen and John Nezlek are the researchers for the current study and that I may contact them at any time at 221-3881. I am also aware that the telephone number of the person to contact for questions about research subjects' right at Hampton University is Dr. Anita Brown at 727-5301 and The College of William and Mary at 221-2144). I am aware that I may receive a copy of the consent form from Monica Allen and that her language is understandable to the subject. My signature below signifies my voluntary participation in this study.

Date

Signature

Appendix D

Instruction Sheet Handout

Instructions:

The Study: This study is about how you psychologically adjust to daily events and plans. In this study, we will be asking you about some questions about your day.

Your Role: You will be asked to complete an online questionnaire every night before you go to bed for two weeks. The study will begin tonight. Please log onto the web address before bed tonight, and fill out the first form.

The Web Address: You will sign onto the Internet each night at this address:
<http://staff.wm.edu/diary/>.

The First Time You Log On: The first time you go to this address, read the instructions on the web page. Then click on the “Register” button in order to register for this study. You will be asked to type in a user ID. You must use a 6-digit logon ID. For example, please use the first letter of your first name, first letter of your second name, and the first four of your last name. (Ex. Mralle). You will then be asked to type in a password. You are strongly encouraged to use the same password that you are familiar with, preferably the one you use to log onto the Internet most often. Once you are registered for the study, you are ready to start. Click on the “Start” button for a one time answering of the questions, and then proceed to click on the “Today” button. The length of these first questions will be the most amount you will have to complete initially. Everyday thereon the sections will be shorter and briefer, which should only take 5-10 minutes a night to complete.

The Nightly Questionnaire: After registering for the study for the first time, you will only have to click on the “Today” button each night. You will then see a series of questions that you will need to answer by clicking the mouse over the appropriate button. **You will have to answer all of the questions, or you will not be able to submit your form and proceed to the next section.** Once you have answered all of the questions, click on the “Submit” button. As there are several sections to submit, please be sure that you have completed the entire brief survey before logging off.

If You Miss A Day: If you miss a night, please continue the study the next night by logging on as usual. Do **not** make up the missed questionnaire by doing two at once. The computer notes the time and duration of each questionnaire submitted.

At the End of Your Two Weeks: After you have entered your final days worth of data (approx. 14 days) you will need to click on the “Finish” button to complete the last

questionnaires. Once you have completed your participation in this study, please do not forget to complete the “Final” questionnaires.

Confidentiality: The data and results from this study will be kept **strictly confidential**. Only Monica Allen and the Masters Thesis advisor, Professor John Nezlek, will have access to your answers. Your name will never be associated with any of your responses or with the results of this study. The Internet site is secure, and your responses are not accessible to anyone but the researchers. We even do not have access to your password.

A Few Other Notes: Please realize that it may take a little longer the first few times you log on and fill out your nightly questionnaire. Once you are used to the process; however, it will be a short time span. Your thoughtful participation each night will be greatly appreciated.

Questions?: If at any time during the study you have questions, please feel free to contact either Monica Allen at 221-3864 or John Nezlek. Or you may e-mail at mralle@wm.edu. We will be glad to answer any questions you may have regarding the study.

Thank you,

Enjoy!

Monica R. Allen

Appendix E

Day-to-day Web Instructions

Welcome to the Cross-Cultural Study of Daily Life.

As a participant in this study, you will be answering a series of questions about your day. The questions are divided into three sections. You may answer the questions in any order you want, although we have put the questions in the order that makes them easier to answer.

The three sections are:

1. A description of the events that occurred in your life today.
2. How and what you thought about yourself today.
3. How you felt today.

The first thing you will need to do is register for the study. Do this by clicking on the Register button below. You will be asked to enter your login id and a password. You may choose any password you want. Please remember it.

After registering, you should then click on the Start button below. This will take you to a page where you will answer a few questionnaires. You need to do this **ONLY ONCE**. After you complete the START questionnaires you will return to this page and you can start entering your daily data by clicking on the TODAY button. To enter your data for each day, simply click on the TODAY button.

On the last day of the study, please click on the FINISH button below. This will take you to a page where you will answer a few questionnaires. You need to do this **ONLY ONCE**. After you complete the FINISH questionnaires you will return to this page and you can start enter your last day of data.

- For all questions, you will need to click on the button representing your response.
- Although some of the questions in different sections may seem redundant, they do focus on slightly different issues.
- Make certain that you respond to each question. If you do not answer a question you will be prompted to re-enter missing responses when you submit your form.
- If you are using INTERNET EXPLORER, you may find it easier to complete the form by changing to FULL-SCREEN mode. How you do this will depend upon the specific version of Explorer you are running.

- Thank you for your cooperation.

Click Here to Register for this study

Register

To enter data for today, click here:

TODAY

To enter START data, click here:

START

To enter FINISH data, click here:

FINIS

VITA

Monica Robin Allen

Born in Chicago, Illinois on July 18, 1977, and moved to Oklahoma City, Oklahoma when she was four. She graduated from Westmoore High School in May 1995. She attended Hampton University where she received her Bachelors of Arts in Psychology in May 1999. She entered the master's program at The College of William and Mary in the Fall of 1999 and graduated in July 2001. In the Fall of 2001, she will be taking a teaching position at Hampton University and will attend graduate school to pursue her doctorate within the following year. She plans on studying Industrial/Organizational and Social Psychology while in her Ph.D. program.